

What is claimed is:

1. A method of providing a marketplace for computing capacity in a computer network, comprising:

receiving an indication of needed computing capacity, including a bid amount, for a first computer in the computer network;

receiving an indication of available computing capacity, including an ask amount, for a second computer in the computer network;

matching the first computer's need for computing capacity, including the bid amount, with the second computer's available computing capacity, including the ask amount, and;

enabling the second computer to provide at least a portion of said available computing capacity to the first computer in response to said matching step.

2. The method of claim 1, wherein said indication of needed computing capacity further comprises a start time and an end time for delivery of the needed computing capacity.

3. The method of claim 1, wherein said indication of needed computing capacity further comprises a quantity of the needed computing capacity.

4. The method of claim 1, wherein said quantity of the needed computing capacity further comprises an amount expressed in units of either floating point operations or web page views.

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5. The method of claim 1, wherein said indication of available computing capacity further comprises a start time and an end time for delivery of the available computing capacity.
 6. The method of claim 1, wherein said indication of available computing capacity further comprises a quantity of the available computing capacity.
 7. The method of claim 6, wherein said quantity of the available computing capacity further comprises an amount expressed in units of either floating point operations or web page views.
 8. The method of claim 1, which further comprises the step of:
providing membership status for the plurality of member computers in the computer network.
 9. The method of claim 8, wherein the member computers have previously provided said indication of needed computing capacity and said indication of available computing.
 10. The method of claim 1, wherein the member computers provide said indication of needed computing capacity and said indication of available computing capacity on a real-time basis for spot market transactions.
 11. A system of providing a marketplace for computing capacity in a network, comprising:
a server for receiving an indication of needed computing capacity, including a bid amount, for a first computer in a computer network;

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said server receiving an indication of available computing capacity, including a bid amount, for a second computer in the computer network; and

a program in the server, for matching the first computer's need for computing capacity, including the bid amount, with the second computer's available computing capacity, including the ask amount;

whereby the server enables the second computer to provide at least a portion of said available computing capacity to the first computer.

12. A business method of providing a marketplace for computing capacity in a network, comprising:
 - receiving an indication of needed computing capacity, including a bid amount, for a first computer in a computer network;
 - receiving an indication of available computing capacity, including an ask amount, for a second computer in the computer network;
 - matching the first computer's need for computing capacity, including the bid amount, with the second computer's available computing capacity, including the ask amount, and;
 - enabling the second computer to provide at least a portion of said available computing capacity to the first computer in response to said matching step.

13. A method of providing a marketplace for computing capacity in a computer network, comprising:
 - receiving an indication of available computing capacity, including an ask amount, for a selling computer in the computer network;

receiving an indication of needed computing capacity, including a bid amount, for a buying computer in the computer network;

matching the buying computer's need for computing capacity, including the bid amount, with the selling computer's available computing capacity, including the ask amount, and;

enabling the selling computer to provide at least a portion of said available computing capacity to the buying computer in response to said matching step.

14. The method of claim 13, wherein the step of matching further comprises:
- identifying all sellers who have available capacity during a period that the buyer has identified as needing capacity;
 - comparing the buyer's bid amount with each identified seller's ask amount;
 - selecting a seller having a lowest ask amount less than the buyer's bid amount;
 - if the buyer's bid amount is greater than the selected seller's ask amount, then identifying the buyer and the selected seller as matched;
 - if the buyer's bid amount is less than the selected seller's ask amount, then identifying the selected seller as a negotiating seller;
 - signaling the buyer that a negotiating seller has been found, signaling the negotiating seller that a buyer has been found, and monitoring negotiations between the buyer and the negotiating seller;
 - if the buyer and the negotiating seller change either or both the bid amount and the ask amount so that the amounts match, then identifying the buyer and the negotiating seller as matched.

15. The method of claim 14, which further comprises:
- reducing the magnitude of the quantity of available capacity from the seller, by the amount of computing capacity provided by the seller to the buyer.
16. The method of claim 15, which further comprises:
- if the amount of computing capacity provided by the seller to the buyer is less than the quantity of needed capacity by the buyer, then identifying another seller who has available capacity during the period that the buyer has identified as needing capacity.
17. A system of providing a marketplace for computing capacity in a computer network, comprising:
- a server for receiving an indication of available computing capacity, including an ask amount, for a selling computer in the computer network;
- said server receiving an indication of needed computing capacity, including a bid amount, for a buying computer in the computer network; and
- a program in the server, for matching the buying computer's needed computing capacity, including the bid amount, with the selling computer's available computing capacity, including the ask amount;
- whereby the server enables the selling computer to provide at least a portion of said available computing capacity to the buying computer.

18. A business method of providing a marketplace for computing capacity in a computer network, comprising:

receiving an indication of available computing capacity, including an ask amount, for a selling computer in the computer network;

receiving an indication of needed computing capacity, including a bid amount, for a buying computer in the computer network;

matching the buying computer's needed computing capacity, including the bid amount, with the selling computer's available computing capacity, including the ask amount, and;

enabling the selling computer to provide at least a portion of said available computing capacity to the buying computer in response to said matching step.

19. A computer program product for providing a marketplace for computing capacity in a computer network, comprising:

a computer readable medium;

a computer program code in said computer readable medium, for receiving an indication of available computing capacity, including an ask amount, for a selling computer in the computer network;

a computer program code in said computer readable medium, for receiving an indication of needed computing capacity, including a bid amount, for a buying computer in the computer network;

a computer program code in said computer readable medium, for matching the buying computer's need for computing capacity, including the bid amount, with the selling computer's available computing capacity, including the ask amount, and;

a computer program code in said computer readable medium, for enabling the selling computer to provide at least a portion of said available computing capacity to the buying computer in response to said matching step.

20. A computer program product for providing a marketplace for computing capacity in a network, comprising:

a computer readable medium;

a computer program code in said computer readable medium, for receiving an indication of needed computing capacity, including a bid amount, for a first computer in a computer network;

a computer program code in said computer readable medium, for receiving an indication of available computing capacity, including an ask amount, for a second computer in the computer network;

a computer program code in said computer readable medium, for matching the first computer's needed computing capacity, including the bid amount, with the second computer's available computing capacity, including the ask amount, and;

a computer program code in said computer readable medium, for enabling the second computer to provide at least a portion of said available computing capacity to the first computer in response to said matching step.

21. A system for providing a marketplace for computing capacity in a computer network, comprising:
- a server having a processor;
 - a memory coupled to the processor, the memory having a program stored thereon, wherein the processor can read the program and perform the steps of:
 - receiving an indication of needed computing capacity, including a bid amount, for a first computer of the computer network;
 - receiving an indication of available computing capacity, including an ask amount, for a second computer in the computer network;
 - matching the first computer's needed computing capacity, including the bid amount, with the second computer's available computing capacity, including the ask amount, and;
 - enabling the second computer to provide at least a portion of said available computing capacity to the first computer in response to said matching step.

22. The system of claim 21 wherein the processor can read the program and perform the further steps of:
providing membership status in the market server for the plurality of member computers in the network.

23. A method of providing a marketplace for computing capacity in a computer network, comprising:
- receiving an indication of needed computing capacity for a first computer in the computer network;
 - receiving an indication of available computing capacity for a second computer in the computer network, and;

enabling the second computer to provide at least a portion of said available computing capacity to the first computer.

24. The method of claim 23, further comprising:
matching the first computer's need for computing capacity with the second computer's available computing capacity.
25. The method of claim 23, wherein said indication of needed computing capacity comprises a bid amount and said indication of said available computing capacity includes an ask amount.
26. The method of claim 23, wherein said indication of needed computing capacity further comprises a start time and an end time for delivery of the needed computing capacity.
27. The method of claim 23, wherein said indication of needed computing capacity further comprises a quantity of the needed computing capacity.
28. The method of claim 23, wherein said quantity of the needed computing capacity further comprises an amount expressed in units of either floating point operations or web page views.
29. The method of claim 23, wherein said indication of available computing capacity further comprises a start time and an end time for delivery of the available computing capacity.

30. The method of claim 23, wherein said indication of available computing capacity further comprises a quantity of the available computing capacity.

31. The method of claim 30, wherein said quantity of the available computing capacity further comprises an amount expressed in units of either floating point operations or web page views.

32. The method of claim 23, which further comprises the step of:
providing membership status for the plurality of member computers in the computer network.

33. The method of claim 32, wherein the member computers have previously provided said indication of needed computing capacity and said indication of available computing capacity.

34. The method of claim 23, wherein the member computers provide said indication of needed computing capacity and said indication of available computing capacity on a real-time basis for spot market transactions.

35. A method of providing a marketplace for computing capacity in a computer network, comprising:

receiving an indication of needed computing capacity and first requirements for a first computer in the computer network;

receiving an indication of available computing capacity and second requirements for a second computer in the computer network,

matching the first computer's first requirements with the second computer's first requirements; and;

enabling the second computer to provide at least a portion of said available computing capacity to the first computer.

36. The method of claim 35, further comprising:

 said first requirements include a buyer's preferred seller or group of sellers; and
 said second requirements include a seller's preferred buyer or group of buyers.

37. The method of claim 35, further comprising:

 said first requirements include a buyer's required storage capacity; and
 said second requirements include a seller's available storage capacity.

38. The method of claim 35, further comprising:

 said first requirements include a buyer's requirements for specific types of operating systems compatible with the application program buyer needs to be run; and
 said second requirements include a seller's available types of operating systems

39. The method of claim 35, further comprising:

 said first requirements include a buyer's requirement for processor speed; and
 said second requirements include a seller's available processor speed.

40. The method of claim 35, further comprising:

said first requirements include the characteristics of a buyer's network interface; and
said second requirements include the characteristics of a seller's available network
interface.

41. A method of providing a marketplace for computing capacity in a computer network,
comprising:

receiving an indication of needed computing capacity and first negotiating specification
for a first computer in the computer network;

receiving an indication of available computing capacity and second negotiating
specification for a second computer in the computer network,

matching the first computer with the second computer using the first and second
negotiating specifications; and;

enabling the second computer to provide at least a portion of said available computing
capacity to the first computer.

42. The method of claim 41, further comprising:

said first negotiating specification includes a buyer specification of a range of acceptable
ask amounts;

said second negotiating specification includes a seller specification of a range of
acceptable bid amounts.

43. A method of providing a marketplace for computing capacity in a computer network,
comprising:

receiving an indication of needed computing capacity and a buyer's bid amount for a first computer in the computer network;

receiving an indication of available computing capacity and a seller's ask amount for a second computer in the computer network,

matching the first computer with the second computer using the bid amount and the ask amount; and;

enabling the second computer to provide at least a portion of said available computing capacity to the first computer.

44. The method of claim 43, further comprising:

matching the seller with the buyer offering the highest bid amount.

45. The method of claim 43, further comprising:

matching the buyer with the seller having the lowest ask amount.